Daily Breeze

Local News

Help for kelp: Project seeks to restore underwater plant

By Lee Peterson
DAILY BREEZE

Coaxed by shock treatments of light and cold and warm water, leaflike pods release billions of spores that swim to tiny rectangles of nonglazed ceramic tile.

Under fluorescent lights, the spores take hold, mature and mate, and within two months grow into tiny sprouts of giant kelp, the marine plant that once reigned supreme along California's coast.

The kelp “seedlings” are being nurtured by the California CoastKeeper Alliance's new regional kelp restoration laboratory at the Southern California Marine Institute on Terminal Island.

The project is part of an effort by the alliance to rebuild the coastline's decimated kelp forests from Santa Barbara to San Diego by lending a helping hand to kelp having trouble re-establishing itself.

“The problem is that kelp has been reduced to such a state that it can't reproduce on its own,” said Chantal Collier, a biologist and the kelp lab's project manager.

Confronting the kelp have been polluted runoff, overfishing, storms and climate changes like El Nino.

Collier said with efforts to clean up storm water runoff from coastal cities, and proposals to create marine preserves, kelp planted by the project's staff and

preserves, kelp planted by the project's staff and volunteer scuba divers will have a chance to flourish.

The Terminal Island lab is supplying projects at Malibu's Escondido Beach and Crystal Cove south of Newport Beach. Eventually, more restoration sites will be added. The Palos Verdes Peninsula will be a candidate. More labs will be created to supply efforts in San Diego, Ventura and Santa Barbara counties.

The Santa Monica BayKeeper organization in 1997 conducted a pilot kelp restoration project off the Peninsula's Rocky Point. In the Santa Monica Bay, kelp grows only along parts of Malibu and the Peninsula, not the sandy bottom from Torrance beach to Santa Monica.

Students at Lincoln Middle School in Santa Monica have been lending a hand for the past two school years, growing kelp sprouts in special “ecocart” aquarium systems.

After two months of tender loving care in the lab or ecocarts, the 4-inch-long strips of seaweed sprout-covered tile are taken to reefs, 25 to 45 feet below the surface. To anchor them against tidal surge, the tiles are fixed to reefs with rubber bands.

The planted areas are monitored regularly, and compared with kelp areas that have not been planted.

Successful sprouts generally grow about 3 feet high in a few months, said Brendan Reed, staff biologist for the Santa Monica BayKeeper.

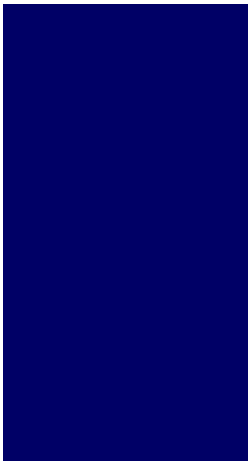
Later, when the kelp has firmly established itself on the reef, the tiles and rubber bands can be removed by divers, Reed said.

Divers obtain the spores by taking “sporophylls” pods from mature giant kelp plants along the coast.

Hundreds of species depend upon the kelp. Fish such as Garibaldi, California sheepshead, calico bass and white sea bass dwell in the kelp forests.

Overfishing of certain species that feed on sea urchins can allow the kelp-eating urchins to proliferate, and denude reefs of seaweed, CoastKeeper officials said.

Past hunting of sea otters, which are a protected species, may also have played a role in allowing the urchins to spread, they said.



“The amount of kelp growing along the coast is significantly reduced from what was growing historically,” said Bob Hoffman, acting regional director of the National Oceanic and Atmospheric Administration and National Marine Fisheries Service. “Habitat restoration like this is one of the most important tasks.”

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